







## TF17 LCD Temperature PI Controller

This controller is applied to control system such as HVAC, heating and cooling, it is connected with NTC10K thermistor sensor. It is widely used in comfortable air-conditioner which needs high-accuracy.

### Features:

- LCD screen, convenient to set and observe
- External sensor (NTC10K thermistor)
- Setting value adjustment: set by up and down button.
- Heat/cool mode transform: remote control via external switch
- Proportion and integration time is adjustable
- Compact size, flexible installation
- Status recovery function

### Operation key:

1.  ON/OFF
2.  UP
3.  DOWN
4.  Transform function
5. Heat / cool transform heat/cool mode (if this function is outer, this button is invalid)

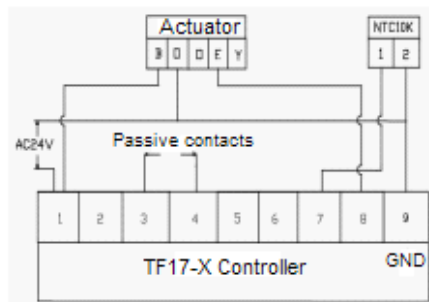
**Function list:**

Function	Description
Lighting	Push any keys,back light is on, while stop operation,back light is off after 5 seconds
Key lock-in	Push function transform key, all the keys lock-in; push it for 5 seconds again, all the keys unlock.
Temperature correction	Push UP key longer than 5 seconds,it shows“OO” 。 Set temperature value by UP and DOWN key
Temperature setting value	Push UP or DOWN , temperature setting value flickers,now adjust temperature setting value by UP/DOWN.
Heat/cool mode transform	Transform heat/cool mode by the switch at the bottom right corner of panel
Status recovery	When suddenly get power off,when turn on it aagain,the sataus is as it before the power off
Passive contact output	When controller is on,two contacts get through; when it is off, two contacts go off

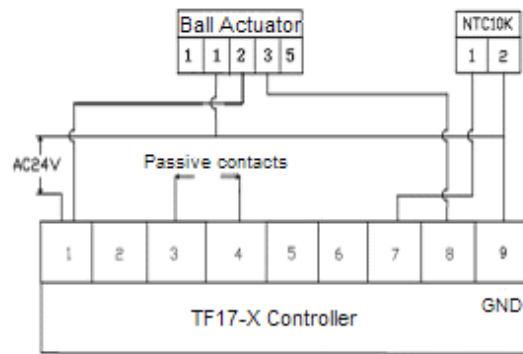
**Parameter:**

Power supply	24VAC, ±15%, 50/60Hz
Rated power	2.5W
Temperature output	NTC10K thermistor
Controller output	0-10VDC; floating (24VAC) output
Controllable temperature range	5°C ~75°C
Cover	ABS,white
Ambient temperature	temperature: 0 to + 50°C
Ambient humidity	humidity: 10 to 90%RH
Passive contact output	1A, 220VAC/30VDC

**TF17-X proportional controller wire diagram:**

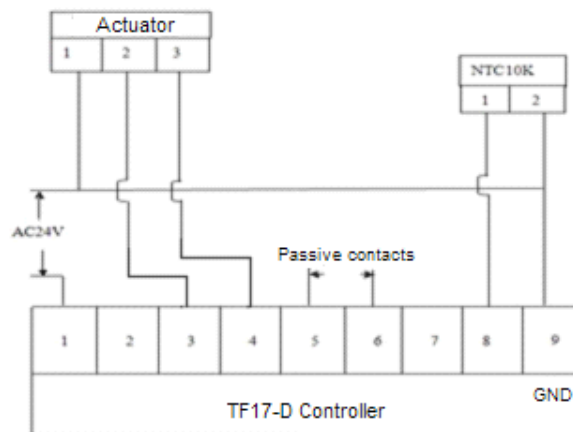


**Figure 1 actuator**



**Figure 2 ball valve actuator**

**TF17-D floating controller wire diagram:**



**Notes:**

- ❖ Never impact or rit when in use,especially LCD screen.
- ❖ Neither clean the surface with water or other organic solvent, nor abrade surface with rough material.
- ❖ Forbid water,conductive/corrosive/inflammable liquid to enter.